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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,084	02/28/2005	Yasuo Ohsawa	Q86525	6653
23373 7590 06/09/2009 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				
EXAMINER				
MAKI, STEVEN D				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/526,084

Applicant(s)

OHSAWA ET AL.

Examiner

Steven D. Maki

Art Unit

1791

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-10 and 12-34 is/are pending in the application.
- 4a) Of the above claim(s) 30 and 31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-10, 12-29 and 32-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB08)
- Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

- 1) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 2) Claims 15, 17, 19 and 32-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 15, the location of the fine width circumferential groove is unclear. For example, it is unclear if the fine width circumferential groove has the location as set forth in claim 13. It is noted that claim 15 fails to describe the tread as having the fine width circumferential groove.

As to claim 17, the claimed number of holes is unclear. Is "opening size ... is made large" descriptive of a single hole (size at one side of the single hole is larger than the size of the other side of the single hole) or a plurality of the holes (one hole has a larger size than that of another hole).

As to claim 19, the claimed number of holes is unclear. Is "depth ... is made deeper" descriptive of a single hole (depth at one side of the single hole is deeper than the depth of the other side of the single hole) or a plurality of the holes (one hole is deeper than that of another hole).

Claim 32 is indefinite because it is dependent on canceled claim 4.

Claim 33 is indefinite because it is dependent on canceled claim 4.

- 3) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5) **Claims 1, 2, 5-7, 29 and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 004 (JP 03-220004) in view of Shiraishi (US 5,054,530), Japan 216 (JP 2000-203216), Emerson (WO 97/46359) and Japan 310 (JP 05-229310).**

Japan 004 discloses a pneumatic tire with an asymmetric tread pattern comprising five land parts and four circumferential grooves 2, 3, 4, 5. The tread has an inside region 6, a center region 7 and an outside region 11. The tire has improved steering stability and resistance to non-uniform wear. See figure 1 and abstract. Figure 1 describes the widths of the circumferential grooves. The circumferential groove 2 has a width "GW2" of 11.0 mm. The circumferential groove 3 has a groove width "GW3" of 13.0 mm. The circumferential groove 4 has a groove width "GW4" of 9.0 mm. The circumferential groove 5 has a groove width "GW5" of 9.0 mm. From this data found in figure 1, the following information can be calculated: The circumferential grooves have an average width of 10.5 mm. The circumferential groove 3 in the inner side region nearest the equatorial plane has a width GW3 of 124% of the average groove width ((13 mm/ 10.5 mm) x 100%). The value 124% falls within the claimed range of at least

120% (wider by 20% or more). The circumferential groove 2 in the inner side region toward the tread end has a width GW2 of 105% the average groove width ((11 mm / 10.5 mm) x 100%). The value 105% falls within the claimed range of 90-110%. The circumferential groove 5 in the outer side region nearest the equatorial plane has a width GW5 of 86% ((9mm/10.5 mm) x 100%). The value 86% falls within the claimed range of less than or equal to 90% (width narrower by 10% or more).

As to claims 1 and 29, it would have been obvious to one of ordinary skill in the art to mount Japan 004's tire on a vehicle through a suspension giving a negative camber and a footprint whose maximum length is offset from center since it well known / conventional (i.e. usual) to mount a tire on a vehicle giving a negative camber and a footprint whose maximum length is offset from center as evidenced by Shiraishi and Japan 216; it being noted that Japan 004's center rib is offset toward the inner side region.

With respect to lateral grooves (claim 1), it would have been obvious to one of ordinary skill in the art to provide the lateral grooves in the inner land part and outer land part such that the volume of the lateral grooves in the inner land part has the smaller volume since Japan 004 teaches forming the lateral grooves in the inner land part with a smaller width (e.g. 6 mm) than the width (e.g. 7 mm) of the lateral grooves in the outer land part (figure 1).

With respect to sipes (claim 1), it would have been obvious to one of ordinary skill in the art to add inclined sipes (grooves / slots having a width of 0-2 mm) to the tread of Japan 004 including the center rib such that the inclined sipes cross the EP

since (1) Japan 004's center rib extends across the EP, (2) Emerson shows an asymmetrical tread having sipes (one of ordinary skill in the art readily understanding the single lines in the figures as being sipes having a width of 0-2 mm) and (3) Japan 310 teaches adding sipes (slots 7 having a width for example 1.2 mm) to increase edge effect to improve snow traction.

As to claim 2, this claim is not limited to only one circumferential groove in the outer side region.

As to claims 5-7, note the suggestion from Emerson and Japan 310 to add sipes to the tread of Japan 004's tire.

As to claim 32, it would have been obvious to provide the sipes such that they are inclined with respect to the radial direction since it is well known / conventional in the tire tread art per se to form sipes such that they are inclined with respect to the radial direction so that they are appropriately active in traction or braking.

As to claims 33 and 34, it would have been obvious to provide the sipes such that the sipe is divided into three segments of which adjoining segments are oppositely inclined with respect to the radial direction at for example at angle of 5-30 degrees since it is taken as well known / conventional in the tire tread art per se to divide a sipe into at least two portions oppositely inclined with respect to the radial direction to improve rigidity and thereby prevent degradation of tire performance.

6) **Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 004 (JP 03-220004) in view of Shiraishi (US 5,054,530), Japan 216 (JP 2000-**

203216), Emerson (WO 97/46359) and Japan 310 (JP 05-229310) as applied above and further in view of Europe 480 (EP 646480).

As to claim 3, it would have been obvious to one of ordinary skill in the art to provide the circumferential groove in the inner side region nearest the equatorial plane with a width of 130-160% of the average groove width in view of (1) Japan 004's teaching to provide the circumferential groove 3 in the inner side region nearest the EP with the largest width (e.g. 13 mm) and (2) Europe 480's suggestion to provide the circumferential groove in the inner side region of a tire with a relatively large width W such that the sectional area is at least 160 mm² to reduce noise while retaining good drainage.

7) Claims 8-10 rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 004 (JP 03-220004) in view of Shiraishi (US 5,054,530), Japan 216 (JP 2000-203216), Emerson (WO 97/46359) and Japan 310 (JP 05-229310) as applied above and further in view of Japan 805 (JP 62-286805).

As to claims 8-10, it would have been an obvious alternative to one of ordinary skill in the art to use closed sipes instead of both end opening sipes since Japan 805 teaches using closed sipes in a tire tread instead of both end opening sipes to improve resistance to uneven wear. As to claims 9 and 10, "recessed dimple" reads on a closed sipe.

8) Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 004 (JP 03-220004) in view of Shiraishi (US 5,054,530), Japan 216 (JP 2000-203216), Emerson (WO 97/46359) and Japan 310 (JP 05-229310) as applied

above and further in view of Japan 408 (JP 03-186408) and Takigawa et al (US 4,214,618).

As to claims 13-15, it would have been obvious to one of ordinary skill in the art to provide the outer land part of Japan 004's tread with a fine width circumferential groove as claimed since Japan 408 and Takigawa et al suggests forming a fine width circumferential groove in a shoulder land parts to prevent wear.

As to claim 14, it would have been obvious to provide the shoulders as curved shoulders with opposite curvature centers as claimed since it is taken as well known / conventional in the tire tread art per se to form a tire having an asymmetrical tread pattern with shoulders having opposite curvature centers as claimed in order to facilitate cornering.

9) Claims 12 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 004 (JP 03-220004) in view of Shiraishi (US 5,054,530), Japan 216 (JP 2000-203216), Emerson (WO 97/46359) and Japan 310 (JP 05-229310) as applied above and further in view of Japan 107 (JP 62-059107).

As to claims 12 and 16-19, it would have been obvious to one of ordinary skill in the art to provide the Japan 004's tread with holes as claimed in view of Japan 107's teaching to form holes in shoulder lands at various depths, spacings, opening sizes and densities to reduce abrasion.

10) Claims 20-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 004 (JP 03-220004) in view of Shiraishi (US 5,054,530), Japan 216 (JP 2000-203216), Emerson (WO 97/46359), Japan 310 (JP 05-229310) and Japan 107

(JP 62-059107) as applied above and further in view of Japan 408 (JP 03-186408) and Takigawa et al (US 4,214,618).

As to claims 20-26, it would have been obvious to one of ordinary skill in the art to provide the outer land part of Japan 004's tread with a fine width circumferential groove as claimed since Japan 408 and Takigawa et al suggests forming a fine width circumferential groove in a shoulder land parts to prevent wear. In claim 20, the description regarding the larger transmission ratio relates to intended use and fails to require structure not disclosed by Japan 004.

As to claim 26, it would have been obvious to provide the shoulders as curved shoulders with opposite curvature centers as claimed since it is taken as well known / conventional in the tire tread art per se to form a tire having an asymmetrical tread pattern with shoulders having opposite curvature centers as claimed in order to facilitate cornering.

11) Claims 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 004 (JP 03-220004) in view of Shiraishi (US 5,054,530), Japan 216 (JP 2000-203216), Emerson (WO 97/46359) and Japan 310 (JP 05-229310) as applied above and further in view of Secondari (US 5,735,979).

As to claims 27 and 28, it would have been obvious to one of ordinary skill in the art to provide Japan 004's tire having the asymmetric tread pattern with the claimed drop off distance since Secondari teaches forming a tire with an asymmetric profile having a defined drop off distance to improve lateral grip and handling properties of the tire particularly during cornering.

Remarks

12) Applicant's arguments filed 2-19-09 have been fully considered but they are not persuasive.

With respect to the issue of adding sipes to the tread of Japan 004, applicant argues that providing good wet drainage conflicts with providing good steering stability. Applicant argues that one of ordinary skill in the art would recognize the conflict provided by structures which increase both wet drainage and good steering stability and wear resistance. These arguments are not persuasive since attorney arguments cannot take the place of evidence. See MPEP 716.01(c).

Applicant argues that Japan 004, Japan 310 and Emerson teach away from their combination. This argument is not persuasive. Sipes (crosswise slots 7 having a width of 1.2 mm) improve traction (slip proof characteristic) as evidenced by Japan 310 (paragraph 37, 44 of machine translation). This teaching coupled with the known teaching from Japan 310 and Emerson to add sipes to a tread pattern, which like that of Japan 004, is asymmetrical, provides ample suggestion to add sipes to the asymmetrical tread of Japan 004. With respect to this combination, case law does not require prior art to show claimed combination as being preferred or most desirable. In re Fulton 73 USPQ2d (Fed. Cir. 2004) (affirmance of 103 rejection involving optimal slip resistance of pattern on shoe sole).

13) No claim is allowed.

14) Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven D. Maki/
Primary Examiner, Art Unit 1791

Steven D. Maki
June 8, 2009